INDEX OF AUTHORS

Volume 19

July 1957 • December 1957

Journal of the National Cancer Institute

Page numbers in italics indicate senior authorship

*indicates main paper in Proceedings

†indicates discussion in Proceedings

Aftonomos, Lefkos, 1065
Alfert, Max, 1023
Algire, Glenn, *817*†
Andervont, H. B., *331*

Ball, Ernest, *582*†
Bang, Frederik B., *698*†
Barvick, Louis, *855*
Beard, Dorothy, 909, *923*
Beard, J. W., 909, 923
Beaudreau, G. S., 909
Bennett, Leslie R., *999*
Bern, Howard A., 1023
Biesele, John J., *785*†
Bischoff, Fritz, *977*
Black, L. M., *663*,* *744*†, *760*†
Bloom, William, *626*†
Boll, William G., *548*†
Bonar, R. A., *909*
Bonting, Sjoerd L., *549*†
Borelli, Jacqueline I., 115
Brakke, Myron I., *681*†
Braun, Armin C., *753**
Brooks, Robin H., 957
Brues, Austin M., *771**
Bryan, W. Ray, 37, 941
Bucalossi, Pietro, 1035

Calnan, Dorothy, *941*
Carroll, Benjamin E., 1087
Chalkley, Donald T., 225
Chèvremont, Maurice, *652*†
Clemmesen, Johannes, *989*
Congdon, Charles C., 875
Connon, Frank E., 999
Cool, Harriett T., 969
Curtis, M. R., 845
Cutler, Sidney J., *1107*

DeBruyn, Wilhelmina M., *835*†
De Cort, J., *1043*
Delcambe, L., 1043
Della Porta, Giuseppe, 33
Del Vecchio, Pasco R., 115
DeWitt, Sara H., *115*
Dixon, Thelma Dunnebacke, *694*†
Dunn, Thelma B., *371*
Dunning, W. F., *845*
Duryee, William R., *834*†

Earle, Wilton R., *781*†, 885
Eisenberg, Henry, 1107
Ellis, Richard A., 451
Enders, John F., *735**
Endicott, Kenneth M., *275*
Evans, Virginia J., *539*,* 885

Fell, Honor B., *601*†, *643**
Fritz, Lois, 361
Furth, Natalie, 361

Gaillard, Peter J., *591**
Gautheret, Roger J., *489*†, *555**
Gey, George O., *784*†
Goldin, Abraham, *1133*
Goldstein, Norma O., 1023
Goodson, Louis H., 855
Grahn, D., 1119
Greene, Harry S. N., *711**
Grinnell, Sarah T., 13
Griswold, Matthew H., 1107
Grobstein, Clifford, *600*†

Groupé, Vincent, *37*

Hanks, John H., *827**
Harkness, Mary N., *1023*
Harris, Morgan, *507*†
Hauschka, Theodore S., *13*
Heller, J. R., *147*
Hilberg, Albert W., 115
Hotchin, John E., *745*†
Hsu, T. C., *867*
Huebner, Robert J., 49
Hull, Robert N., *550*†
Humphreys, Stewart R., 1133
Hyatt, George W., *722*†

Jacoby, Fritz, *653*†
Jones, Marion, *726*†

Kaiser, Raymond F., *259*
Kehr, August E., *761*†
Kelly, Margaret G., 79
Kielley, Ruth K., *1077*
Klein, Eva, *95*
Klein, George, 13, 95, *795**
Klein, Richard M., *679*†
Kvedar, John P., 941

Lane, Montague, 79
Lasfargues, Etienne V., *702*†
Lasnitzki, Ilse, *777*†
Leighton, Joseph, *723*†
Lesher, S., *419*, *1119*
Levi-Montalcini, Rita, *609**
Loo, Ti Li, 79
Love, Robert, *49*
Lumsden, Charles E., *810*†
Lwoff, André, *511**

McCrone, Maureen A., 393
McQuilkin, William T., *885*
Main, Joan M., *1053*
Manning, Miriam D., *1087*
Mantel, Nathan, 1133
Markert, Clement L., *632*†
Martinovitch, Peter N., *651*†
Meader, Ralph G., *225*
Melnick, Joseph L., *746*†
Merwin, Ruth M., *875*
Mider, G. Burroughs, *191*, 957, 969
Milch, Robert A., *87*
Millar, Florence K., *957*, 969
Montagna, William, *451*
Moore, George E., 1
Moorhead, Paul S., 867
Morel, Georges, *680*†, *760*†
Morgan, Joseph F., *393*, *546*†
Moscona, A., *602*†
Murray, Margaret R., *833*†
Mustacchi, Piero, *1035*

Nadel, Eli M., *351*
Nickell, Louis G., *488*,† *680*†
Nielsen, Arne, 989
Nishihara, Hisako, 409

Pace, Donald M., *1065*
Pandolfi, Anna, 1035
Parker, Raymond C., *502*†
Peterson, Rosalie I., 259
Poel, William E., *1013*
Pomerat, C. M., 867
Potter, Van R., *814*†
Prehn, Richmond T., 1053

Quinn, Frances A., 409

Rall, David P., *79*, 87
Ranadive, Kamal, *819*†
Raper, Kenneth B., *627*†
Rauscher, Frank J., 37
Ray, O. Malcolm, 225
Redlich-Moshin, Jean, 409
Révész, László, 13, 95
Riker, A. J., *488*†, *763*†

Sallese, A., 1119
Sandberg, Avery A., *1*
Saxén, Lauri, 1095
Scheele, Leonard A., *145*
Sharp, D. G., 909
Shimkin, Michael B., *295*
Shubik, Philippe, *33*
Skoog, Folke, *578*†
Spencer, Kay, 33
Spencer, Roscoe R., *143*
Steeves, Taylor A., *583*†, *656*†
Steward, F. C., *486*†
Street, H. E., *467**
Suskind, R. Gerald, 49
Syverton, Jerome T., *687**

Thimann, Kenneth V., *531*†
Toal, Jane Nicolet, 969
Tobie, John E., 87
Toivonen, Sulo, *1095*

Uphoff, Delta E., *123*

Venditti, John M., 1133
Vennesland, Birgit, *532*†
Voegtlin, Carl, *141*

Waymouth, Charity, *495**
Weimer, Henry E., *409*
Weller, Thomas H., *702*†

Wetmore, Ralph H., *574*†
White, Julius, 957, *969*
White, Philip R., *840*†
Wilde, Charles M., *628*†
Willmer, E. N., *501*†
Wolff, Etienne, *597*†
Woolley, D. Wayne, *529*†
Wynder, E. L., *861*

INDEX OF SUBJECTS

Volume 19

July 1957 • December 1957

Journal of the National Cancer Institute

Actinomycin C, separation of fractions of and evaluation of their carcinolytic properties, 1043
Adaptation, of cells in chemically defined media, 885
Adenocarcinoma:
  mammary, *see* Mammary tumors
Adenosinetriphosphatase activity, of blood plasma from chickens with avian erythroblastosis, 909
Administration: *see* National Cancer Institute
Age, successful leukemia homotransplantation in young guinea pigs, 351
Allergy, in leukemic children and their mothers, 1087
American Cancer Society, work in cooperation with National Cancer Institute, 189
Amethopterin, relative effectiveness of against advanced leukemia in mice, 1133
  used in treatment of adenocarcinoma E0771 in mice, 855
Aminoazo dyes and other carcinogens, inhibitory effect in riboflavine-deficient rat liver, 1077
Aminopterin: *see* Folic acid congeners
Amyloidosis, radiation-induced, 1119
Antibiotics, activity of actinomycins, 1043
Announcements:
  Russian Translation Program, 989
  Seventh International Cancer Congress, 465, 989
Ascites tumors: *see also* Ehrlich ascites tumors
  progression, population analysis, and adaptation in, 793
Avian erythroblastosis: *see* Virus

Bacteria, data concerning, 511
Benzopyrene, effect on skin carcinogenesis, in mice and rabbits, 361
  in toluene, skin-tumor induction by, 1013
N,N-Bis(2-chloroethyl)aniline, used in treatment of adenocarcinoma E0771 in mice, 855
Blood:
  method of examining for tumor cells, 1
  supply of, to human hair follicles, 451
Bone:
  of laboratory animals, localization of tetracycline in, 87
  ——— marrow,
    genetic factors influencing irradiation protection by, in mice, 12
    leukemic, of rat, 1095
    homologous,
      fate of skin homografts in irradiated mice treated with, 1053
      protection after irradiation, in mice treated with, 875
Breast: *see* Mammary

Cancer: *see also* End results, Epidemiology
  attributes of, 201
  causation of, 192
  incidence of,
    Denmark, 989
    Italy, 1035
Cancer Chemotherapy National Service Center, 275
Carcinogens: *see* Aminoazo dyes, Benzopyrene, Cholesterol oxidation products, Creosote oil

Carcinogenesis:
high incidence of induced fibrosarcomas in mice, 977
inhibitory effect in mitochondria of rat liver, 1077
mechanisms of, 198
review of research on, 245
skin, effect of benzopyrene on, in mice and rabbits, 361
skin tumors, occurrence of in mice, 33
Cells(s):
differentiation, some trends in research on, 609
density, effect on growth in clone of mouse liver cells, 1065
Chemotherapy:
combination, observations on adenocarcinoma EO771 in mice receiving, 855
program, National Cancer Institute, 275
Cholesterol oxidation products, co-carcinogenic activity of, in mice, 977
Chromosome(s):
and tumor growth rate, 13
heteroploid transformation of *in vitro*, 867
Co-carcinogens: *see* Croton oil, Cholesterol oxidation products, Sesame oil
Cortisone, irradiated rats treated with, effect of virus infection on HeLa tumors in, 49
Creosote oil, in toluene, skin-tumor induction by, 1013
Croton oil, role in skin carcinogenesis, 33
Crown gall:
in tissue culture,
and a possible causal virus, 663
comparison of developments in, 753

Deoxyribonucleic acid, cytophotometric determinations of, 1023
Diet, Walker 256 in, 957, 969

Ehrlich ascites tumor(s), growth of, 13
Embryo(s):
embryonic induction capacity in normal and leukemic bone marrow of rat, 1095
tissue, use of tissue-culture methods of study of, 711
End results on cancer,
evaluation of, 1107
program, 285
Enzymes, induced synthesis of, 511
Epidemiology of cancer, 1035
Erythromycin, used in treatment of adenocarcinoma EO771 in mice, 855
Excretion of nitrogen in rats, effect of dietary Walker 256 on, 969

Fibrosarcomas, subcutaneous, spontaneous, and induced in mice, 977
Field investigations and demonstrations branch of National Cancer institute, 259
Fluorescent material, in experimental tumors of mice, rats, and man after tetracycline administration, 79
Folic acid congeners, relative effectiveness of against advanced leukemia in mice, 1133
Fundamental Cancer Research (Rep. Committee Appointed by the Surgeon General). (Pub. Health Rep., 1938), 317

Genes, histocompatibility, permanent change in heterozygous tumor of mouse, 95
Genetics:
factors influencing irradiation protection by bone marrow in F_1 hybrid mice, 123
minimum standards for commercial production of randombred and inbred mice, 1137
Glutamic acid, inhibition of oxidation, 1077
Glycoproteins, effects of tumor growth on concentrations in rat serum, 409
Growth:
and appetite of tumor-bearing rats, effect of dietary Walker 256 on, 957
and behavior of tumors, 248
autonomous, in plant cells, use of tissue culture for study of, 753
of normal rats, effect of dietary Walker 256 on, 969

Hair follicles, human, blood supply, blood vessels, and vascular patterns of, 451
HeLa tumors, growth in cortisone-treated, irradiated rats, 49
Hematopoiesis, hematopoietic tissue in irradiated mice repopulated by homologous marrow, 875
Hemorrhagic disease: *see* Virus—Rous sarcoma
Heterozygous tumors, mutation in, 95
Histocompatibility genes *see* Genes
History, cancer research 295, 331
Homoiotransplantation: *see* Transplantation

Inductors, heterogeneous in rat, 1095
Institution for Investigating the Nature of Cancer. (Edinburgh M. & S. J., 1806), 297
Intestine, small and large, of mice, damage to from daily *gamma* irradiation, 419
Irradiation:
cytologic changes in mouse intestine after daily exposure to, 419
damage in liver and kidney, after occurrence of amyloidosis induced by, 1119
of cortisone-treated rats, effect of virus infection on HeLa tumors in, 49
of mothers of leukemic children, 1087
protection
by bone marrow in hybrid mice, genetic factors influencing, 123
by homologous bone marrow, 875
fate of skin homografts in mice treated with homologous marrow, 1053

Leukemia:
in children, epidemiology and hypersensitivity, 1087
L2B, homoiotransplantation of in guinea pigs, 351
rat, embryonic inductive action of normal and leukemic bone marrow from, 1095
transplantable acute, in inbred rats, 845
Liver cells, mouse, effect of cell density on growth in clone of, 1065

Mammary glands, cytochemical studies in mice of alveolar nodules in, 1023
Mammary tumors:
adenocarcinoma, alveolar nodules from mammary glands of mice compared with, 1023
——— E0771, in mice receiving combination chemotherapy of, 855
——— IRC 741, acute leukemia in rat bearing, 845
in Italian women, occurrence of second primary and etiologic factors, 1035
interpretation of survival rates in women with, 1107
Media, chemically defined *see* Tissue culture
Metabolism:
animal tissue cultures, 495
plant tissue culture, 467
Methotrexate *see* Amethopterin
Mitochondria:
of riboflavine-deficient rat liver, glutamate oxidation in, inhibitory effect of aminoazo dyes on, 1077
Morphogenesis:
in animal tissue culture, 591
trends in research on, 609
Morphology, tissue culture in relation to, 643
Mutation:
cellular and virulence, 827
in transplanted tumor of mouse, 95

National Advisory Cancer Council:
changes in, 185
organization of, 151, 163
present and former members, 335
National Cancer Institute:
appropriations, 151, 156, 159, 166, 167, 174, 176–178, 181, 186, 226, 240–243, 260, 265, 267–270, 277, 297
cancer control, 157, 161, 169, 259
clinical cancer center, 157
construction of research facilities, 151, 176, 243
directors, 139
endowments, 225
establishment of, 147
grant(s) *see also* Research grants branch
field investigations, 269
-in-aid, 153, 160, 166, 168, 176, 225
programs,
biometrics, 181, 271
chemotherapy, 275
education,
activities and information, 183, 184, 264
nurse, 182
professional, 169, 268
epidemiologic and environmental, 270
field investigations and demonstrations, 169, 181, 259, 271
nursing, 182, 262, 267
organization of, 151–186
publications, 162, 184
radium-loan, 155, 160, 183, 263
research,
extramural, 155, 174–176, 189, 190, 225, 259, 275
intramural, 167, 178–183, 191
research fellowships, 154, 159, 176, 188, 238
research grants branch, 225

National Cancer Institute—Continued
programs—Continued
teaching,
in dental schools, 267
in medical schools, 266
in schools of nursing, 267
in schools of public health, 268
therapy, 211, 242, 253, 283
training,
in diagnosis and treatment of cancer, 155, 159
traineeships, 177, 179, 188, 235, 265
staff of, 339
in memoriam, 349
state health departments, 169, 174, 182, 259, 262, 267, 271
National Cancer Institute Act, 133, 147, 150
Nutrition: *see also* Diet
animal tissue cultures, 495
plant tissue cultures, 467
tissue culture, future trends in, 539

Organ culture, significance of developmental stage of, 591

Pathology, in fields collateral to tissue culture, 711
Plant tumors, use of tissue culture for studying development of autonomy in, 753
Plasma-cell tumor, ileocecal origin of in mouse, 371
Polyploidy, as affecting tumor growth, 13
Precancerous lesions in mice, 1023
Protein synthesis in tissue culture, 393

Radiation: *see* Irradiation
Research:
grants branch of National Cancer Institute, 225
history of, 295, 331
programs *see* National Cancer Institute
Riboflavine-deficient rat liver, inhibitory effect of some aminoazo dyes on, 1077
Rous sarcoma: *see* Virus

Schereschewsky, J. W.: biography, 156, 331
Serum, effects of tumor growth on glycoprotein concentrations in the rat, 409
Sesame oil, co-carcinogenic activity of, in mice, 977
Sex, as a factor in skin-tumor metastasis, 1013
Skin: *see* transplantation
Skin tumors:
occurrence of, in untreated Albino mice from dealer's stock, 33
sex as a factor in metastasis of, 1013
Smoking (tobacco), tar from, effect of benzopyrene content on skin carcinogenesis, 361
Standards, minimum, for commercial production of randombred and inbred laboratory mice, 1137
State health departments: *see* National Cancer Institute
Statistics, Cancer:
in Denmark, age-adjusted for U. S. standard population, 989
in Italian women, 1035
mammary, interpretation of survival rates of women with, 1107
Streptomyces antibioticus, actinomycin A isolated from, 1043

Techniques:
for examination of blood for tumor cells, 1
for preparing wound washings for cytologic evaluation, 115
paper chromatography in isolation of actinomycin fractions, 1043
Tetracyclines:
fluorescent material in experimental tumors of mice, rats, and man after administration of, 79
localization in bone of laboratory animals, 87
Third Scientific Report on Investigations of The Imperial Cancer Research Fund (Bashford, E. F.). (London, 1908), 307
Tissue culture(s):
adaptation of cells to chemically defined media, 885
animal,
and human tumors, 771
morphogenesis in, 591
nutrition and metabolism of, 495
chromosome transformation of human cells in, 867
effect of cell density on growth in clone of mouse liver cells, 1065
future of,
in cancer research, 827
in cell differentiation and morphogenesis, 609
in nutrition of, 539
virus studies in, 735
in relation to morphology, 643

Tissue culture(s)—Continued
malignancy in, 795
mammalian cells in, response to virus infection of, nutrition and metabolism in fields collateral to, 511
plant,
histogenesis in, 555
nutrition and metabolism of, 467
study of development of autonomy in plant cells with, 753
viruses and other pathogenic agents in, 663
protein synthesis in, 353
Transplantation: *see also* Virus—Rous sarcoma
animal, combination of tissue-culture methods with, 711
description of transplantable plasma-cell tumors in mice, 379
homoiotransplantation, of leukemia 2B in young guinea pigs, 351
of acute leukemia in inbred rats, 845
of homologous bone marrow into irradiated mice, 875
of skin, in irradiated rats treated with homologous marrow, 1053
Triethylenemelamine, used in treatment of adenocarcinoma E0771 in mice, 855
Tumor cells:
in tissue culture, 771
spread of, in blood, 1

Virus:
avian erythroblastosis,
adenosinetriphosphatase activity of blood plasma from chickens with, 909
neutralization by antiserum to normal chicken protein, 923
Coxsackie B3,
effect on HeLa tumors in rats, 49
infection, response of mammalian cells in culture to, 687
future of studies, in tissue culture, 735
plant and other pathogenic agents in plant tissue cultures, 663
Rous sarcoma,
hemorrhagic disease and hepatic lesions associated with intracerebral passage, 37
variability in transplanted tumors, 941

Walker carcinosarcoma 256:
as a dietary constituent fed to rats, 957, 969
effect of growth on serum glycoprotein concentrations in the rat, 409

U. S. GOVERNMENT PRINTING OFFICE: 1957